Abstract

A catadioptric projection lens (1) which is designed in particular for use in microlithographic projection-exposure apparatus includes a plurality of refractive optical elements having intrinsic birefringence both in a catadioptric part (5) and in a dioptric part (18) adjacent to the image plane (3). Because these refractive optical elements in the catadioptric part (5) and in the dioptric part (18) are decoupled from one another with respect to polarisation by a polarisation-sensitive reflective layer (10), the catadioptric part (5) and the dioptric part (18) are compensated separately from one another with respect to intrinsic birefringence.